

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,046	10/24/2001	Kinya Washino	FNI-02604/03	8765
25006 GIFFORD KR	7590 06/15/200 ASS SPRINKLE ANI	7 DERSON & CITKOWSKI, P.C	EXAM	INER
PO BOX 7021			KOSTAK, VICTOR R	
TROY, MI 480	107-7021		ART UNIT	PAPER NUMBER
			2622	
			MAIL DATE	DELIVERY MODE
			06/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
		10/004,046	WASHINO ET AL.			
	Office Action Summary	Examiner	Art Unit			
•	•	Victor R. Kostak	2622			
	The MAILING DATE of this communication app	pears on the cover sheet w	ith the correspondence address			
Period fe	or Reply					
WHIC - Exte after - If NO - Failt Any	IORTENED STATUTORY PERIOD FOR REPLICHEVER IS LONGER, FROM THE MAILING DEPOSITION OF THE MAILING	ATE OF THIS COMMUNI 36(a). In no event, however, may a will apply and will expire SIX (6) MOR a, cause the application to become Al	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>02 A</u>	pril 2007.				
·	•	action is non-final.				
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.E). 11, 453 O.G. 213.			
Disposit	ion of Claims					
		97 300-307 and 310-319 i	s/are pending in the application			
دے ۱	 Claim(s) <u>256,265,266,268,276,284,285,293,297,300-307 and 310-319</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 					
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) 256,265,266,268,276,284,285, 293,2	97,300-307 and 310-319	is/are rejected.			
7)	Claim(s) is/are objected to.		•			
8)[Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	ion Papers					
	The specification is objected to by the Examine	· er				
	The drawing(s) filed on is/are: a) ☐ acc	<u></u>	by the Examiner.			
,	Applicant may not request that any objection to the		<u>.</u>			
	Replacement drawing sheet(s) including the correct	tion is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).			
11)⊠	The oath or declaration is objected to by the Ex	caminer. Note the attached	d Office Action or form PTO-152.			
Priority ı	under 35 U.S.C. § 119		•			
_	Acknowledgment is made of a claim for foreign	priority under 35 H S C 8	\$ 119(a)-(d) or (f)			
	☐ All b)☐ Some * c)☐ None of:	priority under 33 0.3.C.	3 119(a)-(a) of (i).			
-,	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document		application No.			
	3. Copies of the certified copies of the prio	rity documents have been	received in this National Stage			
	application from the International Bureau	u (PCT Rule 17.2(a)).				
* 5	See the attached detailed Office action for a list	of the certified copies not	received.			
			·			
Attachmen	t(s)					
	ce of References Cited (PTO-892)		Summary (PTO-413)			
	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)		s)/Mail Date nformal Patent Application			
	r No(s)/Mail Date	6) 🔲 Other:				

U.S. Patent and Trademark Office PTOL-326 (Rev: 08-06)

Art Unit: 2622

1. Applicant's arguments filed on 04/02/07 in the Request for Continued Examination have been fully considered but are not considered persuasive. Of the remaining claims, applicant has not amended them substantively.

The following rejections accordingly still apply to those claims, and are repeated below from the last Office action.

Applicant's arguments are addressed in the context of the rejections.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 317-319 are again rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As pointed out in the last Office action, in line 18 of claim 317 "a graphics processor" has ambiguous antecedence because "graphics processor" (no article) is initially recited in line 3. Furthermore, it does not look like graphics processor 116 (not numerically labeled in the Figure) actually carries out the RGB processing because only stage 120 is disclosed as doing that processing (col. 11 lines 13-23), which stage is a standard/widescreen interface to the graphics processor.

Dependent claim 318 recites "a graphics processor" that has ambiguous antecedence to either of the graphics processors previously recited in base claim 317.

Applicant may have inadvertently overlooked this section of the last Office action.

Art Unit: 2622

- 3. Regarding another initial matter, it is noted that the subject matter of claim 293 is actually the same as canceled claim 294 (which parallels remaining claims 265 and 284). Applicant probably intended to keep claim 294 instead of claim 293.
- 4. The reissue oath/declaration filed on 04/02/07 defective because the error which is relied upon to support the reissue application is not an error upon which a reissue can be based. See 37 CFR 1.175(a)(1) and MPEP § 1414.

As pointed out in the last Office action, the stated error to be corrected by reissue is directed to an invention restrictable from the originally elected subcombination claimed in the '157 patent, and therefore not correctable by reissue (see MPEP 1412.01).

To elaborate, all of the originally field claims of 08/30/94 were directed to converting a image into multiple formats. Specifically, all four of the independent claims introduced the field of endeavor as a "multi-format audio/video production system for use with a display device ..."; "multi-format audio/video production system forming part of a general-purpose computer platform ..."; "in an enhanced personal computer having a color monitor, the method of producing a video program ..."; and "in a video production system ...".

Applicant's alleged error so stated in the Oath is, specifically, that none of the claims "are (is) directed to an audio visual method or system wherein editing is performed on video information in a digital format having a frame rate of substantially 24 frames per second (fps), with the edited video information being stored on a high capacity storage medium in a format also having a frame rate of substantially 24 fps." Nothing more is discussed as to the originally filed claims regarding their scope or limitations. Consistent with that "error" is the complete

Art Unit: 2622

cancellation of all of the original 21 claims (and subsequently allowed claims), and a submittal of a large amount of new claims, all of the independent claims headed by language introducing a different field of endeavor. Inclusion of some features from original claims to provide some kind of linkage to newly filed claims does not necessarily tie original claims to new claims as commonly examinable inventions.

MPEP 1412.01 specifies that "reissue claims *must* be for the same general invention." Instead, applicant has canceled all of the previously original and patented claims to seek coverage of claims directed to diverse inventions, in claims that would have been restricted from the original claims. MPEP 1412.01 disallows such practice.

As was also decided in *In re Weiler*, 790 F.2d 1576 229 USPQ 673 (Fed. Cir. 1986) wherein it is stated that Weiler

"was seeking to claim subject matter entirely distinct from anything anywhere earlier claimed or attempted or intended to be claimed, and was not seeking to obtain a broadened or narrowed claim to subject matter claimed in the patent proffered for surrender,"

the Court asserted that

"The reissue statute was not enacted as a panacea for all patent prosecution problems, nor as a grant to the patentee of a second opportunity to prosecute de novo his original application."

As pointed out above, applicant has submitted this reissue with the complete cancellation of all of the original 21 claims (and subsequently allowed claims), and a submittal of a large

Art Unit: 2622

amount of new claims, all of the independent claims headed by language introducing a different field of endeavor.

Applicant argues that the claims on reissue fall into the originally elected Group I, not group II. But that was not contended by the examiner nor is it an issue here.

Applicant also argues that the (original) examiner characterized the group I claims as directed to "an image capturing system." However, the original claims do not now exist because completely new claims have replaced them; and how they may have been characterized (instead of how they were actually presented) is not the same thing.

Also worth noting is that the original Declaration dated 10/24/01 merely states that the "error" (apparently discovered earlier) involves "certain" claims that "include limitations which are unnecessary to distinguish the subject matter of our invention over the prior art. More specifically, the independent claims of our issued patent include elements directed towards specialized interface units and display modes of operation which are not necessary to a fundamental embodiment of our invention." (section 6 of the Declaration). In a following submittal, applicant submitted an entirely different set of claims directed to subject matter distinct from the original claims.

Then subsequent to that, a newly submitted declaration with yet new and divergent claims was submitted, wherein a new "error" was discovered, namely the lack of claims being directed to an audio visual method or system wherein editing is performed on video information in a digital format having a frame rate of substantially 24 frames per second (fps), with the edited video information being stored on a high capacity storage medium in a format also having a frame rate of substantially 24 fps" in the declaration of 3/11/05 (repeated in the declaration or

Art Unit: 2622

04/02/07). The appropriate question raised is how the vague language describing the first "error" in the first declaration leads the examiner, one of ordinary skill in the art, or anybody, to recognize the subsequent discovery of the "error" identified in the later declaration. Both declarations cover different inventions, and both diverge from the original claims.

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

- 5. Claims 256, 265, 266, 268, 276, 284, 285, 293, 297, 300-307 and 310-319 therefore remain rejected as being based upon a defective reissue declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.
- Claims 256, 265, 266, 268, 276, 284, 285, 293, 297, 300-307 and 310-319 also stand rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc.* v. *Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement,* 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp.* v. *United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claim subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader

Art Unit: 2622

scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Applicant has broadened language that was previously surrendered during prosecution of the original application critical to issuance of the of the claims in original application. In the amendment of 08/11/95, applicant specifically and explicitly in an effort to overcome patent 5,243,433 to Hailey. Applicant states in that amendment that Hailey "neither implies nor suggests (1) the use of such an intermediate format nor (2) does Hailey include any means for the storage of images, temporarily or permanently during conversion directly from an input format to an output format." It is further noted that the intermediate format, as claimed, explicitly involves "a graphics processor." The claims were allowed upon inclusion of this express claim language.

None of new independent claims 256, 276, 285, 312 and 317 recites essentially expressly (1) the use of such an intermediate format nor (2) does Hailey include any means for the storage of images, temporarily or permanently during conversion directly from an input format to an output format expressly involving a graphics processor. Claims 256, 285 and 312 do not even recite a graphics processor let alone the association with an intermediate format or direct storage from an input to an output during conversion. Only claims 276 and 317 recite a graphics processor but fail to recite or imply inclusion of the intermediate format and the input/output storage relationships (see further MPEP 1412.02).

Applicant argues that there is no attempt at recapture and that the examiner did not correctly apply the three-step test. The examiner grants that the three steps may not have been expressly enumerated, but the test was applied, wherein:

Art Unit: 2622

(1) the broadening involves the removal of the subject matter indicated in italics above, as was presented in the last Office action;

- (2) more specifically, that subject matter described by that language was shown to be surrendered in the filing by reissue; and
- (3) regardless of additional features being included in the new claims, the removed subject matter, upon which patentability was initially granted, was not covered by broader-but-still-included language regarding the storage device, and an intermediate format is still not included. The vague relationship between the now-deleted subject matter critical for issuance in the original application and the inserted subject matter is far from the straightforward "orange peel" and "citrus fruit peel" example relationship given in MPEP section 1412.02

The Pannu decision was in fact cited above and in the last Office action.

Applicant's arguing as to what the (previous) examiner may have considered as claim language that overcomes the prior art (particularly Hailey) does not dismiss applicant's responsibility of his action taken to get the claims allowed, such action specifically and directly involving what he submitted by amendment.

Applicant also argues that added language covering a narrower scope is significant.

The examiner counters by again pointing out, in view of the three-step recapture test, that regardless of the language characterized by narrower scope, the critical features originally added are still absent, and whatever language applicant considers adequate as a broader limitation thereof is not sufficient.

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2622

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 256, 265, 266, 268, 276, 284, 285, 293, 297, 300-307 and 310-319 also stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The examiner's new language addressing applicant's arguments is presented in **bold** to assist in distinguishing it from the language repeated from the previous Office action.

In line 9 of new claim 256, applicant now recites performing "non-linear editing" on the video information and the audio information (in an apparent attempt to characterize the embodiment shown in Fig. 4). Only one time in the entire disclosure is "non-linear editing" mentioned, and that is in passing. That text states that "techniques such as non-linear editing, animation, and special effects will benefit from the implementation of this system." Nowhere is non-linear editing disclosed in the context of any circuit arrangement, nor are its benefits elaborated on or later disclosed anywhere. Applicant now recites such a step in method claim 256 in specific relationship with other steps. Nowhere does applicant follow up in the disclosure on how or where non-linear editing is carried out.

Applicant argues that non-linear editing was known at the time of filing (even six years before), and cites a Peters patent.

Art Unit: 2622

That is irrelevant. Just because certain subject matter was known before does not mean that the same subject matter is disclosed in an another separate application or patent.

There is no lack of understanding of the phrase. What is lacking is applicant's explicit incorporation of such.

Again, "non-linear editing" is mentioned only once in passing, and only in a futuristic sense. Col. 4 line 57 refers to such and only to suggest that it "will benefit" from the implementation of this (i.e. the disclosed) system.

Applicant contends that non-linear editing has been referenced in multiple instances of the disclosure, one instance spanning lines 38-44 of col. 8. However, that text recites "editing" rather than "non-linear editing" – the second being more specific — and that it is anticipated that the "editing" units would be employed in much the same way as video cassettes ...". That is it. That is futuristic. How "non-linear" editing — or any editing — is actually incorporated is not disclosed at all. There is no process or step disclosed, nor in which stage of production such is implemented. The vague language in the specification is not enough to direct of ordinary skill in the art to realize actual non-linear editing.

Applicant's only other reference is to language in the Field of the Invention" section, wherein it is stated that "editing and manipulation" of images is proposed. How that translates to actual "non-linear" editing is not disclosed and one of ordinary skill in the art is not to carry out undue experimentation to maybe incorporate such.

Art Unit: 2622

As is also recited in line 8 of method claim 312, the non-linear editing is claimed as involving the video information in its "digital production format." In fact, the phrase "digital production format" is nowhere recited in the original disclosure as well, yet recited in claim 312.

The examiner accepts applicant's proposal to remove reference to "digital production format" since such is not recited anywhere in the original disclosure.

Yet further, the broader phrase "production format" is only mentioned twice in the original disclosure, namely in col. 2 lines 51 and 55-56, in general terms covered only by the summary of the invention.

Applicant further claims that the non-linear editing is performed on the audio signal as well (in line 9 of claim 256), which is nowhere disclosed in the original specification.

Applicant argues that non-linear editing being applied to audio signals was well known at the time of filing. Again, that viewpoint is irrelevant because he did not disclose any actual non-linear editing let alone specifically to audio data. Interleaving of audio/video data (to which applicant refers) dos not support such.

Applicant is correct that non-linear editing is not recited in claim 312.

Claim 312 also specifies "receiving" video and audio information, which suggests broadcasting. However, the broadcasting embodiment is limited to the Fig. 7 embodiment, which furthermore fails to discuss audio reception. Applicant may have implied the camera embodiment which also includes an audio pickup, but it is not clear.

Applicant argues that the examiner is limiting the definition of the term "receiving" which therefore improperly limits the description of the embodiment in Fig. 7. Applicant further provides a dictionary definition of the term "receiving."

Art Unit: 2622

It is evident that applicant intended to refer to the embodiment of Fig. 7 because dependent claims 313-315 specify types of receiving media in the receiving end of a communication system, and only Fig. 7 covers the three different kinds. Applicant is further informed that the meaning of a term like "receiving" is more specific in the field of electrical communication than that given in a more general dictionary.

Moreover, it is not even clear which embodiment is intended to be described by claim 256. The only embodiment that in some way describes "receiving" is shown in Fig. 7 since it has broadcast reception inputs 212 and 214. However, there is no discussion of audio processing. The Fig. 4 embodiment does not disclose "receiving" by any input stage, any specific audio conversion into a "production format", nor any audio storage. The audio stage 136 is discussed in col. 12 lines 4-11 which fails to cover the specifically claimed audio processing.

Applicant argues that the examiner is unfairly limiting the coverage of the system recited in claim 256 to possibly Fig. 7 because the claim language is not clear. Applicant also says that it is improper to limit any claim to an embodiment depicted in a figure of the patent (citing a Court decision).

However, it is proper to limit a claim to a single embodiment when only that embodiment is consistent with and gives support to that claim language, and the others do not. If some claimed features or only one claimed is not disclosed as being included in an embodiment then the claim cannot correspond to that embodiment.

Upon review of applicant's disclosure and in consideration of his arguments, it is agreed that claim 256 can be correlated to Fig. 7 or to Fig. 6 (wherein Fig. 6 incorporates

Art Unit: 2622

Fig. 4 as MAPS stage 162). (However, and as pointed out previously, features such as "non-linear editing" are not disclosed.)

Another issue is the new language "when the video information is not received in such a format" (i.e. the 24 fps format) recited in lines 5-6 of claim 256 and in line 4 of claim 312. Such language implies that at times a video signal actually assumes a 24 fps rate in its transmission state. Applicant does not disclose this in the original disclosure nor is it a typical rate used in A/V communication.

Actually, upon review, such phrase is redundant, so that objection is withdrawn.

Conversion of a signal into a specific format is done when that signal is not received in that format.

Applicant argues that such language was included in original claim 13 of the parent patent. Actually, the phrase "if necessary" was recited, which is not the same thing.

Addressing another matter, applicant appears to incorporate the embodiment of Fig. 4 as single stage 162 into the embodiment of Fig. 6. That cannot be accepted by one of ordinary skill in the art because of what would result in incongruent connectivities. There is no clear nexus between the Fig. 4 embodiment and stage 162 of the Fig. 6 embodiment, considering the additional system components. In fact, Fig. 6 is described as a system of existing *and planned* formats, which admits that physical realization of that embodiment may not be actual.

Applicant in effect admits that the Fig. 6 arrangement is futuristic as it contemplates planned formats. Applicant therefore cannot be any more specific in his disclosure than to be indefinite in vaguely describing his physical relationship between Fig. 4 and Fig. 6, the objections raised in the immediately preceding paragraph accordingly being maintained.

Art Unit: 2622

Furthermore regarding dependent claim 265, a 1920 x 1080 format is recited therein, but that format is only disclosed regarding the Fig. 7 embodiment. That embodiment does not involve audio processing which is recited in base claim 256 and only disclosed in Fig. 4. The Fig. 4 and Fig. 7 embodiments are not compatible.

Applicant argues that the only material difference between the two figures is in the manner in which video data is received. Applicant has however not pointed out where the 1920 x 1080 format accounted for in the Fig. 4 embodiment. Moreover, it is clear that the respective graphics processors are vastly different. Compatibility therefore cannot be assumed.

As for new claims 276 and 285, they too recite new matter. Applicant recites capturing done by a camera (claim 285 which is similar to claim 276 and therefore implying a camera; the other non-camera embodiments not disclosing or suggesting such) with subsequent recording and conversion processing, of which *only* the embodiment of Fig. 2a covers. (It is also noted that "capturing" is not expressly recited anywhere in the original disclosure.) It is pointed out that only the Fig. 2a embodiment includes recording (stage 8) which incorporates graphics processing (stage 82 in Fig. 3). The alternate camera embodiments shown in Figs. 2b and 2c do *not* include the recording stage. Their digital processing is either output directly or first converted to analog form. Only the Fig. 2a camera includes any subsequent processing including recording and conversion.

Moreover, the format used by the camera is limited exclusively to PAL/HDTV formats (col. 6 lines 25-32). Therefore, the claimed capturing at a frame rate of 24 frames/second (recited in both independent claims 276 and 285) cannot be supported by the original disclosure.

Art Unit: 2622

Along with this, there is no disclosure of recording stage 8, unique to the camera of Fig. 2a, as recording at 24 fps.

Applicant agrees that "capturing" involves a camera. Independent clams 276 and 285 recite "capturing" video information at a 24 fps frame rate.

Applicant's video camera does not do that. It only provides PAL/HDTV rates. It must convert the captured rate into the desired 24 fps rate. Applicant alludes to col. 3 to point out that he describes a "modified" camera, and refers to cols. 5, 6 and 8 to demonstrate that his camera generates a 24 fps signal. The 24 fps signal is provided by converting the *captured* PAL/HDTV signal. Applicant's disclosure does not go beyond this. And again, the camera 160 of Fig. 6 is a film source.

Applicant goes on to argue that the recording of the camera data (stage 8 of Fig 2a referred to by the examiner) is indeed done at a 24 fps rate because all of applicant's recording is done at 24 fps. The text in col. 1 mentions recording at that rate, but nowhere positively or implicitly refers the to camera of Fig. 2a as doing such. There is no text in col. 8 that expressly mentions a 24 fps recording rate.

Furthermore, the graphics processor (specifically recited in claim 276; implied in parallel claim 285) is said to perform specific frame rate and size conversion, but the graphics processor 82, unique to the camera embodiment is never disclosed as performing these operations. The only text describing graphics processor 82 spans lines 9-21 in col. 9, which does not specify or imply such conversion operations. Moreover, the graphics processor requires *dedicated* hardware (col. 9 lines 9-15).

Art Unit: 2622

Yet further, the other graphics processors, regardless of their capabilities, cannot be considered by one of ordinary skill in the art as capable of being substituted for graphics processor 82. They all have exclusively distinct input/output connectivities unique to each other. Camera graphics processor 82 only has single RGB input and single RGB output capabilities as disclosed (with alternative color formats). Graphics processor 116 in Fig. 4 far exceeds that of processor 82 in terms of available inputs and/or outputs, as does stage 162 in Fig. 6. The arrangement shown in Fig. 7 is beyond the camera stage (as are the other embodiments) and involves a graphics processor 242 yet further different from the camera processor 82. The original disclosure fails to describe a connection between the embodiments. The arrangement in Fig. 4 is introduced as showing "components that comprise a multi-format audio/video production system" (col. 9 lines 39-40). The next line states "As in the case of the computer disk-based recording system of Fig. 3, ..." which is language presuming a different - rather than overlapping, elaborated on, or incorporated system – than that of the previously described (camera) system.

Nowhere is the recording stage 8 of the camera (detailed in Fig. 3) described as recording at that rate. Graphics processor 82 is not described as doing such, regardless of applicant alleging that it somehow leads one of ordinary skill in the art to presume such. Applicant's expressions (top of page 22 of the arguments) to show that all recording is reflected at providing that rate is not definite.

Applicant also argues that Fig. 6 covers all of the embodiments of the invention. It cannot. It only uses that film source 160 as its input.

Art Unit: 2622

In addition, dependent claims 284 and 293 recite a 1920x1080 format which is disclosed only involving the Fig. 7 embodiment (col. 14 line 5). If the camera embodiment is described by claims 276 and 285, then these dependent claims cannot further limit their respective base claims.

Applicant argues that different size formats are discussed throughout his disclosure.

That does not mean that this particular format is covered by everything when it is only discussed in a particular context, so the objection is proper.

Addressing claim 316, applicant claims specific RGB processing as a process involving data captured by the camera. However, that RGB-to-Y matrixing is disclosed as *only* involving stage 120 of the multi-format A/V production embodiment of Fig. 4 (col. 11 lines 13-23). It is clear that graphics processor 82 of camera 2a is wholly different from graphics processor 116 which includes interface 120, both as they appear in the Figures and as they are described in the original disclosure.

Likewise regarding claim 317, since the RGB-to-Y matrixing is disclosed as *only* involving stage 120 of the multi-format A/V production embodiment, it is not explained how two graphics processors are recited (lines 3 and 18). None of the embodiments of Figs. 2a (incorporating Fig. 3), 4, 6 and 7seem capable of working as united systems because they all incorporate different respective graphics processors. It is not clear which embodiment is in view, particularly when only stage 120 contains the RGB processing shown in Fig. 5.

Moreover, the second graphics processor recited in line 18 (apparently not the same as the first) is stated to operate on R"G"B" components, but that is not disclosed in the original disclosure.

Art Unit: 2622

Claims 316 and 317 may be allowable over the prior art but remain rejected on the based on 112 1st paragraph.

Applicant's arguments regarding reception "not" in a 24 fps format has been addressed above.

In so far as the two inputs to digital tuner 218 argued as not being conventional, they must be. Regardless of stages 218 and 22 being required, the signals are indeed broadcast by providers in formats apparently available through airwaves for eventual presentation. The fact that digital processing and decompression is incorporated simply shows that that such stages are used to subsequently reproduce the broadcast programming. Reception must be compatible with transmission. Programming is *not*, however, done using film frame rates.

8. Claims 256, 265, 266, 268, 276, 284, 285, 293, 297, 300-307 and 310-319 further remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As discussed above, all of the claims were presented new with the amendment of 12/03/04, and were additionally amended and added to on 10/03/05. These claims have been shown to constitute new matter (explained above), and as such, the original disclosure does not enable one of ordinary skill in the art to make and use the newly-defined invention. Since the original disclosure lacks express language accounting for the claimed subject matter, then the

Art Unit: 2622

claimed invention has not been adequately disclosed to enable one of ordinary skill in the art to make and use the claimed invention. Whatever language covering certain features may exist does not adequately tie together the composite embodiments defined by the newly drafted claims.

There is no express description or inferential language that allows one of ordinary skill in the art to make permissible connections among the embodiments shown in Figs. 2a, 4, 6 and 7:

Fig. 2a *only* goes with Fig. 3, and the camera *only* provides PAL or HDTV formatted data;

Arguments countering applicant's have been provided above.

Fig. 5 only goes with stage 120 of Fig. 6;

Applicant correctly indicates that there is no stage 120 in Fig. 6. The examiner intended to refer to Fig. 4.

The specific relationship between Fig. 4 and Fig. 6 is not adequately explained in so far as how the entirety of the Fig. 4 arrangement is readily fitted into stage 162 of Fig. 6 regardless of the multitude of accessories. (The disclosure of Fig. 6 is limited to a single paragraph spanning lines 24-39 in col. 12.);

The examiner's arguments countering applicant's have been provided above.

Fig. 7 *only* permits *conventional* broadcast or the information highway as processable inputs. Transmission at a 24 fps film frame rate is not used in broadcasting;

The examiner's arguments countering applicant's have been provided above.

Fig. 6 only allows for film frame rate data to be processed.

Applicant acknowledges such.

Art Unit: 2622

Moreover, all three evidently disconnected systems incorporate graphics processors that differ from one another significantly. The camera embodiment processor 82 *only* operates on RGB or other color components (col. 9 lines 11-15) and has a single input and single output, as shown. The graphics processor 116 of the multi-format A/V production system of Fig. 4 includes plural interfaces that accommodate a multitude of analog and digital inputs and outputs (how the interface are incorporated into a unitary component 116 is not disclosed but shown as stacked components). How the graphics processor of Fig. 4 is somehow incorporated into stage 162 in the Fig. 6 arrangement which has a single output bus line to plural accessories is not explained. That graphics processor only accommodates film rate input formats. And graphics processor 242 of the "complete TV production system" depicted in Fig. 7 provides only a single output comprising analog/composite output.

Yet further, and as was also pointed out by the previous examiner, the capabilities of general-purpose computers at the time of filing were limited. That examiner cited the following language from "Solution 3 – The Standard Platform" from page 2/9 of the publication "NON-STANDARD PLATFORMS – READY FOR THE DIGITAL ERA" by Owen et al. of "Quantel Limited" dated 11/24/94, which is *subsequent* to applicant's effective filing date:

"Standard computers do not offer digital video inputs and outputs and few, if any, parts of the system can run at real time video rates. But, as shown in figure 4, a whole system can be configured, involving the processors and RAM as well as specialist hardware such as disks, to handle video data and cards to provide video I/O. At this point the

Art Unit: 2622

platform may no longer be capable of running a full range of software packages – some parts requiring reconfiguration for other applications. Clearly this is no longer a standard platform."

Furthermore, in consideration of what applicant purportedly invented involving video and film post-production system supposedly based on general-purpose computers, the following citation from the abstract on page 442 of the publication "The Digital Transformation of Hollywood: Format and Resolution Independent Digital Post-Production" by Epstein et al. was also submitted by the previous examiner:

"With the constant increase in general purpose computational power, many digital post-production systems are now being based on general purpose, commercially available computer systems rather than proprietary ones. The rate at which film and video post-production is digitally processed in proportion to the use of general purpose computers in this industry."

Applicant proposes as his invention (noting the first paragraph in the Summary of the Invention):

"The present invention takes advantage of general-purpose hardware where possible to provide an economical multi-format video production system. In the preferred embodiment, specialized graphics processing capabilities are included in a high performance personal computer or workstation, enabling the user to edit and

Art Unit: 2622

manipulate an input video program and produce an output version
in a final format that may have a different frame rate, pixel dimensions,
or both."

In light of the two citations quoted above and based on what applicant purports as his invention, applicant's disclosure in essence amounts to nothing more than what was acknowledged as the state of the art regarding post-production using general purpose hardware. Applicant's disclosure does not add anything specific beyond a review of various known and proposed video formats. The supposed key feature of the graphics processor is never expressly disclosed beyond that which applicant describes as "dedicated hardware," where only once is any specific mention made of actual processing hardware, namely a standard convertor by Snell & Wilcox (col. 10 line 65). However, that piece of hardware (argued by applicant is the response of 06/01/04) is specific *only* to converting standards – not to "graphics processing" per se.

In light of the disparate graphics processors incorporated in the different respective embodiments limited to specific formats, and in light of the lack of express graphics processing despite the various input/output connections, applicant has in effect disclosed nothing more than an invitation to experiment with software and hardware, which is not enough to enable one of ordinary skill in the art to make and use his invention.

Applicant's arguments regarding what is "standard" or "general purpose" to what may be "dedicated" indicate the vagueness of his disclosure (the examiner considering in full the arguments spanning pages 25-30, noting specific referencing to various technical disclosures).

Art Unit: 2622

Stated differently, the specifics of his disclosure are limited to what was at that time realized in video/computer/graphics processing and what the continuing developments in and the evolution of in the field of such signal processing may conjecture, to the effect that his disclosure describes its limited hardware specifics to what the conjecture *may eventually allow*.

Repeated from the last Office action, the only discussion regarding incorporation into a general-purpose computer is in col. 1 lines 45-48 and lines 53-62 wherein applicant describes what appears as proposed systems that are said as not yet feasible. Stated in col. 1 lines 53: "Although general-purpose PC-based equipment may never allow professional-style rendering ...each new generation of microprocessors enables progressively faster, higher-resolution applications. In addition, as prices ... fall, the capacity of such devices has risen dramatically, thereby improving the prospects for enhancing PC-based image manipulation system for such applications." This language speaks only of what may occur; not what applicant has actually invented. Phrases like "specialized graphics processing capabilities are included in a high-performance personal computer or workstation ..." (col. 2 lines 46-48) and "the enhancement to a general-purpose platform preferably takes the form of a graphics processor ..." (col. 2 lines 62-64) do not exactly translate to a "general-purpose" computer readily performing the multiple specific enhancements afforded by a graphics processor vaguely incorporated therein.

From that, the apparent paradox of what is not enabling and what would have been obvious is not so contradictory considering that the applicant in the same vein discloses nothing more than what can be upgradeable or dedicated processing to known

Art Unit: 2622

video/graphics processing, and be limited to the express hardware known at the time of filing. As a result and what may appear to be a fine line, one of ordinary skill in the art can reasonably argue, one the one hand, that implementable hardware would have been obvious, and on the other hand, that if not so available then enablement comes in question.

To that effect, applicant's graphics processors are described and shown in disparate arrangements in limited terms of specific hardware so dictated their different respective capabilities. That does not mean that any one graphics processor is interchangeable with any other. The reasonable objections that seem contrary therefore can be presented.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 256, 266, 268, 297, 300-303 and 311 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein et al. in view of Spoer and in view of Hioki et al.

Applicant's arguments are addressed in the context of the rejections in **bold** text to assist in distinguishing the arguments from the rejection.

Reviewing the digital post-production system of Epstein (e.g. Abstract), it includes obtaining (i.e. receiving) media from various sources characterized by different formats (2nd col. on page 443), including film, which is characterized by a 24 frame/sec rate, and involves conversion from analog to digital form, if not already in digital form (1st col. on page 442).

Art Unit: 2622

Included in the digital production is RAID storage (1st col. on page 442 and page 444) that is randomly accessible. The resulting edited signal is eventually displayed (2nd col. on page 442).

Although Epstein does not expressly disclose the typically accompanying audio component of a film or video signal, it would nonetheless have been obvious to include such well-known auxiliary data, as disclosed by Hioki (e.g. Abstract) which would thereby complete the A/V programming.

Moreover, Epstein also points out that he can transform any imagery to any other desired output format and resolution "easily," and can involve "creative manipulation" (2nd col. on page 443). Epstein also mentions various linear and non-linear processing in the post-production stage (col. 1 on page 443).

In view of this and in view of the fact that Spoer (who also discloses digital production involving conversion of different formats into others) includes non-linear editing (transforming) like panning (page 221), it would therefore have been obvious to incorporate any suitable linear or non-linear manipulation in Epstein/Hioki, for the clear benefit of providing the post-production operator with as large a range of editing options possible, such being a typical desire of the studio operator.

Applicant argues that Epstein is futuristic. Epstein is an express disclosure regarding digital format and resolution conversion and manipulation. Furthermore, the examiner counters by pointing out that applicant's disclosure is futuristic as explained at length above and in previous Office actions by both the current examiner and the previous examiner, wherein proposals are made.

Art Unit: 2622

Applicant also argues that he converts into a 24 fps frame rate, and that the examiner correlates Epstein's conversion from analog into digital form.

Applicant's claim language is not exact. The conversion regarding applicant's recited "converting the video ... to a digital production format having a frame rate of substantially 24 fps ..." can be reasonably interpreted as only involving analog-to-digital conversion. This language does not exclude the possibility of the input signal having a 24 fps frame rate. The claim language can suggest conversion only involving analog to digital form. The frame rate may be the same throughout. Applicant appears infer such as being the examiner's interpretation (and evident from the citation in Epstein in the argument on top of page 31), and accordingly counters by pointing out that applicant also converts the frame rate.

However, the examiner did not limit that interpretation to such, as is evident from the rejection and the citations in Epstein. The examiner pointed out language of Epstein on pages 443 and 444 as well as from page 442, wherein Epstein discusses format and resolution conversion that can be "easily done", specifying formats including film. Film format is a standard 24 fps frame rate.

Applicant also argues that Epstein does not disclose processing beyond conversion.

Applicant should have realized that that is why Spoer and Hioki were combined therewith.

Applicant further provides further unpersuasive arguments.

One is where he describes the Hioki system but fails to acknowledge that Hioki was cited to show that recording of audio data very typically accompanies video data to

Art Unit: 2622

complete a program. Applicant instead argues that Hioki is directed to an analog MUSE format. Somehow, then, audio cannot accompany video data in other formats.

Applicant then argues that Spoer does not contemplate any significant storage capabilities. It is clear that Spoer was not cited for meeting the claimed storage capabilities. That is met by Epstein which the examiner expressly addressed previously. The examiner provided Spoer to show that non-linear editing was known in systems involving digital production that also includes format conversion. Applicant fails to mention storage capabilities disclosed in Hioki but brings up such in Spoer. Such is irrelevant anyway since Epstein discloses recording.

Yet further, applicant's interpretation of Epstein/Spoer allegedly being limited to post production applications and acting on portions of a program is both just conjecture and irrelevant. One of ordinary skill in the art would not limit Epstein/Spoer to only post-production work based on the overall disclosures. One of ordinary skill in the art would also not consider that only some portions of programming can be manipulated and others not. Which portions of the data of Epstein/Spoer cannot be manipulated is not identified by Epstein/Spoer nor is such identifiable by one of ordinary skill in the art. Regardless, and again, applicant's claims do not exclude post-production operations or conversion of every pixel of every frame.

Applicant's final argument, which he considers important, involves the feature of converting a (particular) format into another format "when it is not received in such (that other) format." That is inherent, as explained above. There is no reason to, and it does not make sense to, convert a signal into a format in which it already exists.

Art Unit: 2622

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or <u>in the knowledge generally available to one of ordinary skill in the art</u>. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In response to applicant's argument that the discussed features of Hioki and Spoer cannot be incorporated into Epstein, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Claim 256 accordingly stands rejected.

Regarding claim 266, this claim is met because the alternative option of "equal to" the 24 frame/sec rate (recited in base claim 256) is met by Epstein.

As for claim 268, both Epstein and Spoer disclose conversion into different .
horizontal/vertical dimensions, and therefore aspect ratios.

As for claim 297, Spoer expressly mentions an HDTV format, and Epstein allows for any of plural (open-ended) formats.

Art Unit: 2622

Looking at claims 300-303, plural display formats are suggested by Epstein, and Spoer discloses plural raster formats and display modes as well. Included as options are selection among different aspect ratios and/or frame rates (video, film, PAL and NTSC).

Regarding claim 311, the 2048 x 1152 format of Spoer (No. 9 listed in Table 2) is a standard 16:9 (widescreen) format. Some of the additionally listed formats also exceed the traditional 4:3 format.

10. Claim 265 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein in view of Spoer and Hioki, in further view of Wilkinson '464.

As explained above, both Epstein and Spoer allow for any of plural editing and display formats to be adopted (standard including PAL, NTSC, 16:9 widescreen, European HDTV, etc). It would have been obvious to include any workable format since the studio operator typically prefers an exhaustive list of options in such a creative environment. Therefore, any 4:3 or 16:9 aspect ratio format, such as 1920 x 1080 as disclosed by Wilkinson (col. 3 line 51) in his system would have been an obvious selection. He also discloses generating a common 24/frame/sec post-production format for editing (col. 1 lines 28-35).

In response to applicant's argument that Wilkinson involves recording and describes a common "method" rather than a common "format," again, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is

Art Unit: 2622

what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The 1920 x 1080 was a known format (at the time of filing, evidenced by Wilkinson), regardless of Wilkinson being in the field of recording. Applicant somehow attempts to argue that the 1920 x 1080 spatial array expressly disclosed by Wilkinson dismisses the availability of such specific two-dimensional imagery to Epstein/Spoer. Neither Epstein nor Spoer are required to exhaustively list the specific numbers of every two-dimensional spatial format known. As explained above, both Epstein and Spoer allow for any of plural editing and display formats to be adopted (standard including PAL, NTSC, 16:9 widescreen, European HDTV, etc). From this, one of ordinary skill in the art would have recognized that the known 1920 x 1080 format would be allowed rather than excluded.

The argument that Wilkinson does not allow for any change in frame rate is irrelevant. Both Epstein and Spoer disclose such. Again, Wilkinson was cited to acknowledge one of many known spatial formats.

11. Claims 276 and 285 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Schafer in view of Six, in further view of Faber (5,335,013, of record).

Schafer discloses, as one input source option, a digital camera capable of generating a 24/frame/sec video rate (1st paragraph on page 12/1); a digital recording therefore (list of system elements on the bottom of page 12/4) that stores the input video format in the 24 f/s rate (e.g. penultimate paragraph on page 12/3); plural high-capacity disks to choose from (high-resolution intermediate system Fig. 5); and subsequent processing for display (page 12/5).

Art Unit: 2622

Schafer discloses a post-production work station (noting again Fig. 5), but does not expressly describe a graphics processor. He does, however, disclose editing involving computer-created graphics (2nd paragraph on page 12/5).

As explained above, complicated data manipulation tests the limits of a general-purpose computer which prompts the development of an increase in computational power, so it would accordingly have been obvious to incorporate dedicated or adaptable graphics processing, as disclosed by Six in his modified computer (introduction staring in the 1st col. on page 835; the GP chip disclosed in col. 2). The processing of Schafer can involve resolutions exceeding 2000 lines (which is above the standard traditional and widescreen formats: 1st paragraph on age 12/5).

Applicant argues that Schafer discloses a film camera, whereas applicant discloses a video camera. As pointed out previously, applicant does not disclose a video camera that generates a 24 fps rate signal. The only formats specified by applicant involving his camera embodiments are PAL/HDTV which do not operate at 24 fps. Any subsequent conversion (as by a pull-down process) to generate that rate does not qualify the camera as a 24 fps camera. Schafer does the same in that regard. So the claim, as pointed out previously, is not supported. The only other 24 fps camera disclosed by applicant is that in Fig. 6 numbered element 160 and labeled a *film* source.

Nonetheless, as Faber discloses, a solid-state camera that generates imagery a 24 fps (col. 4 lines 25-27) is a known device that can further be used in format conversion processing, as is disclosed by Faber. Such imagery would have been obvious to use in the processing system of Schafer since he also operates with different frame rates including 24 fps.

Art Unit: 2622

Furthermore, Schafer incorporates a CCD film scanner that produces electronic imagery from film data to be stored and ultimately to various selectable image manipulation using a workstation.

Applicant argues that there is not frame rate conversion carried out by Six. The claims do not require frame rate conversion. A 24 fps signal is input and a frame rate or greater than *or equal to* is required in the claimed conversion process.

Regardless, and again, the conversion processing s disclosed by *Schafer*. Six is incorporated to show that dedicated graphics processing is known in the field of A/V processing.

Applicant also argues that there are no audio handling provisions discussed in Six. Six, however, discloses handling of audio signals in his Fig. 3. But that is irrelevant. The claims do not mention audio data.

Claims 276 and 285 accordingly stand rejected.

12. Claims 284 and 293 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Schafer, Six and Faber, in further view of Wilkinson.

Since Schafer discloses editing resolutions at least at 2000 lines, it would have been obvious to include any workable format since the studio operator typically prefers an exhaustive list of options in such a creative environment. Therefore, any 4:3 or 16:9 aspect ratio format, such as 1920 x 1080 as disclosed by Wilkinson (col. 3 line 51) in his system would have been an obvious selection. Wilkinson in fact also discloses generating a common 24/frame/sec post-production format for editing (col. 1 lines 28-35).

Art Unit: 2622

Applicant carries over previous arguments to the rejection of these claims. Those arguments have been addressed above.

13. Claims 304-307 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Schafer and Six, in further view of Epstein.

Since Schafer proposes plural video and film formats which differ in both frame rates, line counts and aspect ratios, it would therefore have been obvious to edit formats of any available formats in post production as allowed by Epstein. Included as options are selection among different aspect ratios and/or frame rates (video, film, PAL and NTSC).

Applicant says that claims 304-309 have been canceled (top of page 35 of his remarks), but claims 304-307 are still listed on page six, so they officially remain. (The rejection is therefore presented again for the sake of completion.)

14. Claim 310 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Schafer, Six and Faber, in further view of Hioki et al.

Schafer discloses digital recording including tape and disk media. It would have been obvious to use well-known optical (or magnetic) disks as disclosed by Hioki (Fig. 7) as an available option since they can be readily incorporated in work stations for selective accessing of the data stored thereon.

Regarding claim 310, typical film and video data include accompanying audio data to complete the programming, as discussed previously. Knowing such, it would have been obvious

Art Unit: 2622

to include audio pick-up with the camera of Schafer for the benefit of eventually providing the user with a complete audio/visual program, as is disclosed by Hioki (noting again Fig. 7).

Applicant again refers to previous arguments and adds that Schafer does not mention audio facilities since he discloses a film camera.

First, applicant's base claim 276 is not supported as explained previously.

Second, claim 310 only recites the capturing of audio data and no facilities beyond that.

Third, Hioki discloses recording of both audio and video, wherein Hioki was cited to show that audio typically accompanies video data to complete programming. (Applicant argues an incorporation of Spoer but he is not used in this rejection.)

And fourth, audio pickup with film cameras was well known at the time of filing (e.g. patents cited for background: 3,837,736; 4,092,062; 4,239,356; 4,483,599; 4,862,278)

15. Claims 312-315 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epstein in view of Spoer and in view of Six.

As discussed above, Epstein operates in the 24 frame/sec format in the post-production stage. Epstein also points out that any image format can be converted into any other size and resolution, and Spoer also discloses (but not exclusively) plural formats and lists some specific parameters. It would have been obvious to one of ordinary skill in the art to edit or display any two-dimensional image of a reasonable manipulatable size, such as 1280 x 720, which assumes the well known 16:9 widescreen (high-definition) format in Epstein, using the programmable processing of Spoer.

Furthermore, it would have been obvious to include store accompanying compressed audio with the compressed video of Epstein, as disclosed by Six, who includes a graphics processor with an audio stage (Fig. n:3 on page 837) that operates on a DPCM code (2nd col. on page 837). Both Epstein and Spoer disclose linear and non-linear editing.

As for claim 313-315, Epstein (1st col. on page 443) and Spoer cover the standard A/V source providers including cable, network and broadcast. Spoer explicitly allows for any I/O interfacing to all kind of digital and analog equipment (bottom of Page 222), and satellite was a well-known A/V source medium at the time of filing.

Applicant argues that the combination of references does not cover a single common format. A single common format is not recited. What stands out is the availability of various formats of both Epstein and Spoer, any of one which can be manipulated.

- 16. Claims 316-319 appear allowable over the prior art (but are rejected under 35 USC 112, as explained above).
- 17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (571) 272-7348. The examiner can normally be reached on Monday Friday from 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, Virginia 22313-1450

Or faxed to:

(571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (703) 308-HELP.

Victor R Kosta

1. but

Victor R. Kostak Primary Examiner Art Unit 2622

VRK